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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,992	03/26/2002	Yasuhiro Maenishi	2002-0430A	9047

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EXAMINER
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TRINH, MINH N

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)	
	10/088,992	MAENISHI ET AL.	
	Examiner	Art Unit	
	Minh Trinh	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 8-14, 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 15-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/26/02, 7/27/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's election of Group I, claims 1-7 and 15-25 in the reply filed on 11/22/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Thus, non-elected claims 8-14 and 26-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made in the reply filed on 11/22/04. An Office action on the merits of claims 1-7 and 15-25 as follows.

### ***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. Further it is suggested the specification, the claims and the abstract should be submitted and are filed separately.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

4. In claims 3-7 and 15-25, line 1, the term: "A" should have been changed to:--  
The--, to reflect the dependent claim formats. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 and 15-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following are examples:

"mounting target information about the mounting target " (claim 1, lines 4-5) is vague and indefinite because it is not clear as to how the above step can be done when the "information " is not an object.

"the fed components"(claim 1, line 10) lacks proper antecedent basis, also it is not clear whether they are directed to a plurality of components of claim 1, line 9.

Please clarify.

"and for" (claims 1, 2, line 16) should be changed to: -- for--.

"and so forth in a mounting apparatus to be used" (claims 1, 2 , line 19, ) should have been -- in a mounting apparatus--.

"is a desirably observed rule " should be:-- in a desirably observed rule--.

It is not known what is being referring as : "the conditions, which are prepared as above . . . to generate the desirably observed rule" (claims 1 and 2, lines 32-35). Also, the limitation recites "in view of prevention of lower productivity or lower quality or in

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view of safety to generate the desirably observed rule” not positive method limitations and it is not known whether or not they are directed to the claimed method as defined in the preamble of claims 1 and 2.

Further, claims 5, 6, 15-20 depend on any one of claims 1 to 3, and 8 to 10 is unclear as to which one of the claims is the associated dependent claims.

It is not clear if “a mounting operation” (claims, 3, 4, etc) the same as that “a mounting operation” recited in claim 1, lines 27-28.

“a rule that” (as described in claim 17, lines 5-20) is unclear and confusing in that it is not clear whether “a rule that “ (claim 17, line 20) is as same as that recited in previous line 1 or 11, etc. Also, these rules are not appear to be positive method limitations.

The scope of claim 25 is not clear because it is directed to a method other than the method of claim 1, line 1. Please correct.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-7 and 15-25 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1175137 to Yabuki et al.

Yabuki et al disclose the component mounting generating data method of the present invention comprising step associated the claims 1-7, comprising steps:

preparing component information to be mounted on a mounting target (see process Fig. 2, shows substantially the method of preparing component information that operatively associated with an apparatus having component feeding, holding, and recognition device, etc (see abstract and the discussion at cols. 6-8, etc), judging step including generating strictly observed rule (as discussed at col. 9, paragraph 0034 and also at col. 10, lines 47-59). Yabuki et al is silent about the teaching of generating data for performing the component mounting operation in consideration of the generated desirably observed rule. However, it is well known to the art for generating data for performing the component mounting operation based on the generated desirably observed rule. Furthermore, it would have been an obvious matter of design choice to choose any desired mounting process including a step of generating data for performing the component mounting operation in consideration of the generated desirably observed rule since applicant has not disclosed that this method step is critical, and patentably distinguishing feature and it appears that the invention would perform equally well with the determining the feasibility of mounting the electronic component on the substrate

and the mounting techniques and configurations as shown in the prior art reference (see Yabuki's Fig.2).

Limitations of claims 2-4 are also satisfied as the same discussion above.

As applied to claims 6-7, It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an automatic means for determining a component mounting procedure of mounting operation of the components vice versa manual means since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Limitations of claims 15-16, as best understood are also satisfied by the Yabuki et al references (see Figs. 2, 4 and 5 and the discussion at cols. 6-11).

As applied to claim 17, it would have been an obvious matter of design choice to choose any desired restrict observed rules since applicant has not disclosed that the claimed subject matter recited in claim 17, lines 5-24 would solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the mounting feasibility including pre-set value for simplifying the mounting process as taught by Yabuki et al (see col. 9-10).

Limitations of claims 18-25, as best understood are also satisfied by the Yabuki et al references (see Figs. 2, 4 and 5 and the discussion at cols. 6-11).

### ***Conclusion***

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited for their teaching of method for mounting component based on the generating data or the like.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mt



Minh Trinh 1/20/05

Primary Examiner Group 3729